

**Amendments to the Claims:**

This listing of claims will replace all prior versions and listings of claims in the application:

**Listing of claims:**

1. (Currently amended) Method for the conversion of a cytosine base in a nucleic acid to an uracil base comprising
  - a) incubating a solution comprising the nucleic acid for a time period that is not less than 1.5 hours and further is not more than 3.5 hours at a temperature between 70 and 90 °C, wherein the concentration of bisulfite in the solution is between 3 M and 6.25 M and wherein the pH value of the solution is between ~~5.0 and 6.0~~ 5.25 and 5.75, whereby the nucleic acid is deaminated, and
  - b) incubating the solution comprising the deaminated nucleic acid under alkaline conditions whereby the deaminated nucleic acid is desulfonated.
2. (previously amended) Method according to claim 1, wherein in step a) the temperature is between 75 and 85 °C.
3. (previously amended) Method according to claim 1, wherein the concentration of bisulfite is between 3.2 M and 6 M.
4. (cancelled)
5. (previously amended) Method according to claim 1, wherein the time period is between 1.75 and 3 hours.
6. (previously amended) Method according to- claim 1, wherein the time period is between 2 and 3 hours.
7. (previously amended) Method according to claim 1, wherein in step a) the temperature is 80 °C, the concentration of bisulfite is 5 M, the pH value of the solution is 5.5 and the time period is between 2 and 3 hours.